



Human Factors

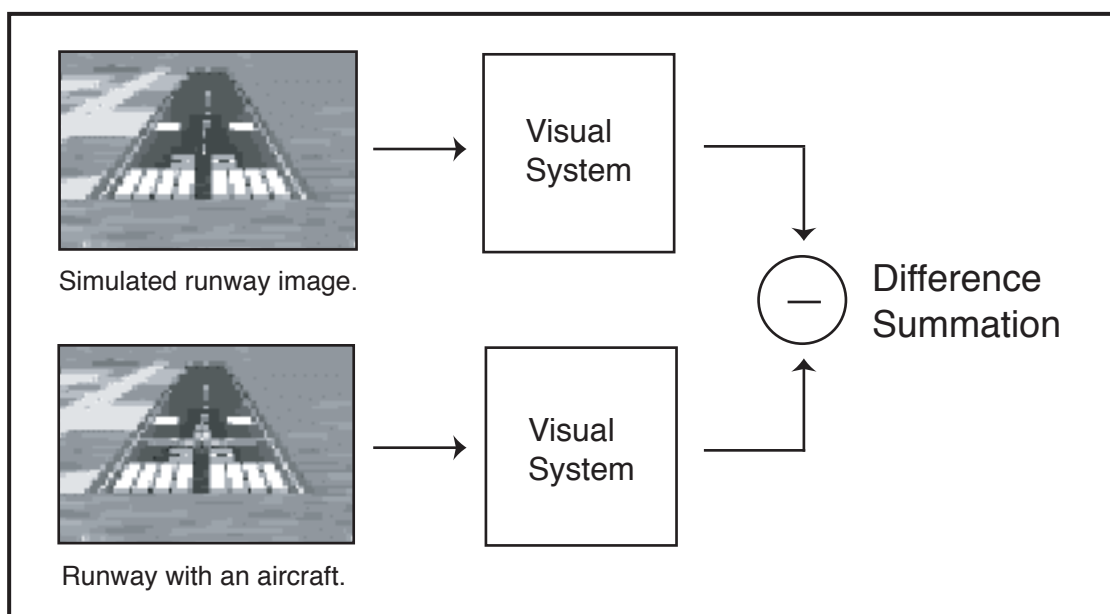
research and technology division



Image Quality Metrics

Objective

Provide computational metrics to improve imaging displays by predicting the effectiveness of potential designs for target detection and recognition.



Approach

Measure the ability of human observers to make visual discriminations, then construct and test computational models to predict their abilities. Simplify models to make them designer friendly.

Impact

Display designers need easy-to-use computational models to evaluate the performance of potential designs. Illustrated metric has been calibrated for detecting an obstacle aircraft on a runway as viewed by an imaging sensor.

POC: Albert Ahumada, Ph.D.

URL: <http://newvision.arc.nasa.gov/personnel/al/code/filtmod1.htm>

E-mail: Albert.J.Ahumada@nasa.gov

